

fibers are restricted to the polyester type, they are advantageous in remelting upon recyclic use.

Among the constituent fibers used in this invention, ultra-large fibers are preferably of 100 denier or more and 5000 denier or less. Fibers of less than 100 denier are soft and difficult to maintain the shape of the cushion material and fibers of 5000 denier or more can not provide favorable cushioning property since individual constituent fibers are excessively hard.

Further, the ultra-larger fibers are preferably contained by at least 30% by weight or more and, more preferably, 50% by weight or more. If the mixing ratio is lower, the function and effect of the ultra-large fibers can not be developed undesirably. On the other hand, if the mixing ratio of the ultra-large fibers is higher, since production of the fiber webs by the carding is extremely difficult due to the lowering of the machine operationability, they are produced by the production method to be described later.

Please replace Table 5 on page 23 with the following table:

Table 5

	Ultra-large fiber	Usual fiber	Self-crimping developable fiber	Binder fiber	Basis unit	Thickness
Denier	500 d	2.0 d	13.0 d	2.0d	g/m <sup>2</sup>	mm
Fiber length	38 mm	51 mm	51 mm	51 mm		
Example	65%		15%	20%	1200	40
Comp. Example		15%	65%	20%	1200	40

Please replace the paragraph starting on line 15 of page 26 with the following text:

It is considered that the first reason of developing the difference is that ultra-large fibers that could not be used in a great amount in the cushion material using the non-woven fabric produced by the existent method, whereas the ultra-large fibers contained at least by more than 30% by weight or more of the constituent fibers develop such as effect in this invention. That is, it is considered that ultra-large fibers, difficult to be put to the carding machine if mixed in a great amount so far, can develop such an effect.

Please replace the paragraph starting on the last line of page 26 with the following text:

A4  
Further, as the second reason, it is considered that such characteristic is developed by the three-dimensional random structure produced without using the carding method and by the mixing of a great amount of ultra-large fibers. That is, it is considered that incorporation of the ultra-large fibers in a great amount can appropriately maintain the inter-fiber gaps developing the impact resilience as the cushion material, to prevent buckling due to aging and, further, three dimensional random arrangement of fibers provides the three dimensional oriented constitution as the entire cushion material and such three dimensional constitution can provide uniform impact resilience in all of the directions to give excellent cushioning property.

Please replace the three paragraphs starting at line 22 of page 27 with the following text:

The fibers constituting the non-woven fabric used for the filter include, for example, polyester fibers having a side-by-side structure and having self-crimping developability, ultra-large fibers of 1000 denier or more and core-sheath type composite polyester fibers with the melting point of fibers constituting the sheath being set lowest among the fibers constituting the non-woven fabric according to this invention. When the fibers are restricted to the polyester type, they are advantageous in remelting upon recyclic use.

A5  
Among the constituent fibers used in this invention, the ultra-large fibers are preferably of 1000 denier or more and 3000 denier or less. If they are less than 1000 denier, gaps between constituent fibers are small tending to increase the pressure loss and cause clogging when used as the filter, and it is difficult to maintain the shape of the filter. On the other hand, if they exceed 3000 denier, the fibers are excessively hard to increase the gaps formed between the fibers larger, failing to collect dusts sufficiently.

Further, the ultra-larger fibers are preferably contained by at least 30% by weight or more and, more preferably, 50% by weight or more. Lower mixing ratio is not desirable since the function and effect of the ultra-large fibers can not be developed. On the other hand, if the mixing ratio of the ultra-large fibers is greater, since production of the fiber webs by the carding is extremely difficult due to the lowering of the machine operationability, they are produced by the production method to be described later.

Please replace the text of Table 9 (page 29) with the following text:

Table 9

	Ultra-large fiber	Usual fiber	Self-crimping developable fiber	Binder fiber	Basis unit	Thickness
Denier	1000 d	2.0 d	6.0 d	2.0d	g/m <sup>2</sup>	mm
Fiber length	64 mm	51 mm	51 mm	51 mm		
Example	65%		15%	20%	700	20
Comp. Example		65%	15%	20%	700	20

Please replace the text of the two paragraphs starting at line 20 of page 31 with the following text:

It is supposed as the first reason for developing the difference that the ultra-large fibers contained at least by 30% by weight or more of the constituent fibers can properly maintain the gaps between constituent fibers without extremely increasing the pressure loss, while such ultra-large fibers could not be used in a great amount for the filter using the non-woven fabric produced by the existent method. That is, the ultra-large fibers, which were difficult to be put to the carding machine if mixed in a great amount, can develop such an effect.

It is considered as the second reason that such characteristic is developed by the three dimensional random structure and mixing of a great amount of the ultra-large fibers. That is, it is considered that by mixing a great amount of the ultra-large fibers, the filter can properly maintain the inter-fiber gaps as the dust collecting region of the filter to prevent great increase of pressure loss and, further, it has the three dimensional random arrangement of the fibers as the filter material by the three dimensional fiber orientation and has excellent dust collecting efficiency by such three dimensional constitution. That is, it is considered that since the paths of dusts upon passing through the filter are not uniform as the entire three dimensional structure of the filter, the dust absorbing characteristic can be improved more than that in the case of the two dimensional randomness.